ABSTRACT OF THE DISCLOSURE

The invention relates to a method for the operation of a direct injection diesel engine (1) which is operated in a first operating region (A) corresponding to low to medium partial load (L_L) in such a way that fuel combustion takes place at a local temperature (T_L) below the temperature of NO_x formation and with a local air ratio (λ_L) above the limit value for soot formation (λ_{LS}), and where fuel injection (I) starts in a range of between 50° to 5° crank angle (CA) before top dead center (TDC) of the compression phase and where exhaust gas is recirculated at an exhaust gas recirculation rate (EGR) of 50% to 70%. In order to achieve high efficiency in each operating region (A, B, C) while keeping NO_x and particulate emissions low, it is provided that in a second operating region (B) corresponding to medium partial load, fuel injection is started in a range from approximately 2° crank angle (CA) before top dead center (TDC) to approximately 20° crank angle (CA) after top dead center (TDC).

Fig. 1